

## **Reporting Releases of Hazardous Substances under CERCLA & EPCRA**

- Background:** Several federal environmental laws require that "releases of hazardous substances to the environment" above certain threshold amounts—Reportable Quantities or RQs—be reported. Current and proposed regulations under these statutes are unclear and make full compliance difficult. Nevertheless, failure to comply could result in civil or criminal penalties. In response to questions raised by several DOE Field Elements, this Information Brief is part of a series that will provide updated information on this and other CERCLA issues. The Environmental Guidance Division (EH-231) has responded to those questions relating the reporting or releases for which EPA has a clearly articulated position. EPA's position on other questions raised by Field Elements has been equivocal; DOE is working with EPA to resolve these outstanding issues. Additional information briefs on reporting releases will be issued as a clear position is defined.
- Statute:** Clean Water Act (CWA), Sect. 311; Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Sect. 103; Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) or Title III of the Superfund Amendments and Reauthorization Act (SARA), Sect. 304.
- Regulations:** 40 CFR 117.21; 40 CFR 302.6; 40 CFR 355.40.
- Reference:** EH-231 Memorandum, January 10, 1990; Subject: Final Reportable Quantities of Radionuclides and Rules for Reporting Releases of Radionuclides under CERCLA.

### **What is a hazardous substance?**

- Hazardous substances are (1) any elements, compounds, mixtures, solutions, or substances specially designated by EPA under Sect. 311 of the CWA (40 CFR 116.4) or under Sect. 102 of CERCLA (40 CFR 302.4); (2) any toxic pollutants listed under Sect. 307(a) of the CWA; (3) any hazardous substances regulated under Sect. 311(b)(2)(A) of the CWA; (4) any listed of characteristic RCRA hazardous wastes; (5) any hazardous air pollutants listed under Sect. 112 of the Clean Air Act (CAA); or (6) any imminently hazardous chemical substances or mixtures regulated under Sect. 7 of the Toxic Substances Control Act (TSCA).
- EPCRA also establishes emergency reporting requirements for "extremely hazardous substances" (40 CFR 355, Appendix A). The list of extremely hazardous substances is the same list of substances published in Appendix A of the November 1985 "Chemical Emergency Preparedness Program Interim Guidance." All of these substances are also CWA and CERCLA "hazardous" substances.

### **What is a reportable quantity?**

- A reportable quantity (RQ) is the amount of a hazardous substance which, when released to the environment, must be reported to the National Response Center (NRC). Reportable quantities are "action levels" that may trigger an appropriate response to a release under provisions of the CWA, CERCLA, or EPCRA. Because the RQs are set at levels intended to trigger the assessment of possible responses including "no action," the RQ values themselves do not necessarily correspond to unacceptable levels based upon exposures or risk assessments.

- Under Sects. 311 of the CWA and 102(a) of CERCLA, RQs for all hazardous substances were initially set at one pound. However, EPA has statutory authority to adjust RQ levels up or down depending on the relative toxicity or carcinogenicity of individual substances.
- By regulation, the RQ for radionuclides has been redefined in units of the curie (Ci), and specific RQs—ranging from 0.001 to 1000 Ci—have been promulgated for 757 radionuclides (54 FR 22524, May 24, 1989).
- RQs for the same substance are not necessarily set at the same value under each listing. For example, the RQ for hydrofluoric acid is 100 pounds under both the CWA (40 CFR 117.3) and EPCRA (40 CFR 355, Appendix A) but is 5,000 pounds under CERCLA (40 CFR 302.4). This situation is somewhat confusing, and EPA is in the process of revising all three lists in order to set a single RQ value for each substances whenever possible.

#### **What is a release to the environment?**

- Currently, EPA considers a "release" to be virtually all conceivable contacts with the environment, including any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment. The abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous substances "contact" with the environment may be appropriate. This issue will be addressed in future Information Briefs as EPA develops policy on administrative exemptions.
- Some releases are excluded, including (1) releases solely in the workplace, (2) exhaust emissions from vehicles, aircraft, vessels, pumping station engines, etc., (3) normal applications of fertilizer, (4) releases of source, byproduct, or special nuclear material subject to Sect. 170 of the Atomic Energy Act (AEA) or Sects. 102(a)(1) or 302(a) of the Uranium Mill Tailings Radiation Control Act (UMTRCA) and (5) "federally-permitted" releases.

#### **What is a "federally-permitted" release?**

- The general assumption underlying the exemptions from reporting requirements for federally permitted releases is that such releases have been evaluated through the permit process and are not considered to be harmful to human health and the environment. Sect. 101(10) of CERCLA identified specific types of releases considered to be federally permitted including:
  - releases of substances and quantities specified in National Pollutant Discharge Elimination System (NPDES) permits, permit applications, or permit administrative records under the CWA;
  - discharges complying with permits for dredge or fill materials under Sect. 404 of the CWA;
  - releases in compliance with RCRA final permits;
  - releases in compliance with enforceable permits under the Marine Protection, Research, and Sanctuaries Act (MPRSA);
  - underground injection of fluids permitted under the Safe Drinking Water Act (SDWA);
  - injection of fluids authorized by state law regulating underground injection of fluids used in petroleum product production or recovery;
  - air releases complying with permit or control regulations under specific provisions of the Clean Air Act (CAA);
  - releases to a publicly owned treatment work (POTW) in compliance with a pretreatment standard and program submitted to EPA for review (must also be in compliance with local limits that take into account site-specific characteristics); and

- releases of source, special nuclear, or byproduct material in compliance with a license, permit, or order issued pursuant to the AEA.
- In general, in order to qualify as "federally permitted," the hazardous substances, quantities released, and activities causing the release must be within the scope of a permit. If a release exceed permitted levels, the excess is not in compliance with the permit and cannot be "federally permitted." Therefore, if the amount of a release that exceeds a permit level (i.e., the portion of the release that is not federally permitted) is equal to or exceeds an RQ, the release that is not federally permitted) is equal to or exceeds and RQ, the release must be reported. In cases where no quantitative limits on the amounts of specific hazardous substances that cannot be released are in the permit, notification is required when the characteristics of the release are not in compliance with the permit and an RQ or more of a hazardous substance has been released. Federally permitted releases also do not include releases exempt from regulation under the applicable federal statutes or those to a medium other than the one specified in the permit.

#### **What is a release in the workplace?**

- EPA has not formally defined what constitutes a release solely in the workplace. However, in the final rule setting RQs for radionuclides (54 FR 22524, May 24, 1989) EPA makes clear that this exemption applies only to releases that occur within a closed space with no emissions to the ambient environment. Thus, spills onto the concrete floor of an enclosed building or plant would qualify as a release solely within the workplace as long as the hazardous substances do not leave the building or structure. In addition, the stockpiling of a hazardous substance in any enclosed containment structure—surface impoundment, lagoon, tank, or other holding device that has an open side with the contained materials directly exposed to the ambient environment—is a release to the environment.

#### **How are reports made?**

- For a release of a CWA or CERCLA hazardous substance, the person in charge should immediately notify the National Response Center (NRC) in Washington, DC at (202) 267-2675. Under EPCRA for emergency reporting of releases of "extremely hazardous substances", the facility or vessel owner or operator should immediately notify the Community Emergency Coordinator for the Local Emergency Planning Committee (LEPC) for any area likely to be affected and the State Emergency Response Commission (SERC) for any state likely to be affected. Because all SARA Title III extremely hazardous substances are also hazardous substances under the CWA and CERCLA, the NRC should also be immediately notified if the hazardous substance RQ is also exceeded.

#### **Is a determination that a local community or state is likely to be affected based on risk assessment?**

- No. EPCRA notification requirements are not triggered by risk-based levels of releases. While some analysis of risk may be an inherent part of establishing an RQ, EPA has indicated that the extremely hazardous substance emergency notification program is not based on risk levels. Therefore, there is no acceptability threshold for on-site or off-site impacts that are based on risk. Consequently, all releases of extremely hazardous substances should be reported to the LEPC and SERC if the release exceeds an RQ, if the release is not federally permitted, and if populations may be affected because of exposure to the extremely hazardous substance.

### **What liabilities exist for not reporting?**

The following civil and criminal penalties exist for reporting requirement violations:

- Under the CWA, possible \$10,000 fine and up to 1 year imprisonment for failure to notify [40 CFR 117.22(a)]; \$5,000 fine per each release or discharge in a 24-hour period exceeding an RQ [40 CFR 117.22(b)]; and an additional civil penalty of up to \$50,000 or up to \$250,000 if the discharge is the result of willful negligence or willful misconduct [40 CFR 117.22(b)].
- Under CERCLA, possible fines according to Title 18 of the U. S. Criminal code and up to 3 years imprisonment/first offense or 5 years imprisonment/subsequent offenses for failure to notify, submitting false or misleading information, or destroying or falsifying evidence [Sect. 103(b)(2)].
- Under EPCRA, civil penalties up to \$25,000 fine for failing to provide emergency notification; criminal penalties of up to \$25,000 and 2 years imprisonment/first offense or \$50,000 and 5 years imprisonment/subsequent offenses for willfully failing to provide emergency notification (40 CFR 355.50).

### **Do routine or continuous releases of hazardous substances need to be reported?**

- CERCLA Sect. 103 (f)(2) provides relief from the reporting requirements of Sect. 103(a) for a release of a hazardous substance that is continuous, stable in quantity and rate, and either is a release from a facility for which notification of known, suspected, or likely releases of hazardous substances has been given under Sect. 103© or is a release for which notification has been given under Sect. 103(a) for a period sufficient to establish the continuity, quantity, and regularity of such release. Sect. 103(f)(2) further provides that in such cases, notification shall be given annually or at such time as there is any statistically significant increase (SSI) in the quantity of hazardous substance released. An April 19, 1988, proposed rule on continuous releases further clarifies these reporting requirements (53 FR 12868, April 19, 1988). The proposed rule states that not every release needs to be reported as it occurs; thus, unnecessary release reporting will be reduced. When a release occurs regularly and in relatively stable amounts, federal response officials need not be regularly notified. Notification of such continuous releases shall be given in a annual report and at times when SSIs occur.

***Questions of policy or questions requiring policy decisions will not be dealt with in EH-231 Information Briefs unless that policy has already been established through appropriate documentation. Please refer any questions concerning the subject material covered in this Information Brief to Rich Dailey, EH-23, FTS 896-7117.***